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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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| Applicant: | Kramer |
| Serial No.: | 09/411,730 |
| Filed: | 10/1/99 |
| Group Art Unit: | 2858 |
| Examiner: | Hamdan, W. |
| Title: | DIAGNOSTIC REMOTE CONTROL |
| Docket No.: | 60,130-569 |



**APPEAL BRIEF**

Assistant Commissioner of Patents
Washington, D.C. 20231

Dear Sir:

Subsequent to the filing of a Notice of Appeal on May 8, 2001, applicant now submits its brief. Fees in the amount of $310.00 are paid by the attached check. If any additional fees are necessary, you are hereby authorized to charge Deposit Account No. 50-1482 in the name of Carlson, Gaskey & Olds.

**Real Party in Interest**

The real party in interest in this application is the assignee of the entire right, Meritor Heavy Vehicle Systems, LLC.

**Related Appeals and Interferences**

There are no related appeals or interferences.

**Status of Claims**

Claims 1-18 stand finally rejected under 35 USC §103.

**Status of Amendments**

No amendments after final rejection were filed in this case.

**Summary of the Invention**

This application discloses and claims an improved method and control for facilitating the diagnostic checking of systems on a vehicle. In particular, heavy duty vehicles, such as trucks, require frequent maintenance checks and electrical components such as brakes, differentials, ABS valves turn signal lamps, brake lamps, and any component having an electrically actuated input. Occasionally, these checks need to be performed by the vehicle operator while the vehicle is in the field. The maintenance check requires that the electrical components be actuated while performing diagnostic analysis on the components. As an example, to test the brake lights, typically the brake pedal must be depressed. The diagnostic analysis of these components will require things such as visually inspecting the components while the component is actuated. Currently, the method for testing these components requires two technicians. A first technician must sit in the cab and actuate the component upon the verbal command of the second technician. The second technician then visually inspects the components.

The present invention discloses a method and control for communicating with a control on the vehicle for actuating each of the components. Thus, a single operator outside of the vehicle is now able to actuate the control to in turn actuate the electrical components. This operator outside of the vehicle can then visually inspect the operation of the components. A remote transmitter is

disclosed for use in communicating with the receiver on the vehicle. The independent claims include method claim 1 and 10. Method claim 1 requires the method steps of relaying a signal from a remote transmitter to a receiver aboard a vehicle, and actuating electrical components on the vehicle in response to the signal from the transmitter. The preamble of this claim recites that the method is for performing diagnostic analysis on the electrical components. Independent method claim 10 is narrower and recites the steps of programming an electronic control device on a vehicle with an actuation sequence for vehicle electrical components. The signal is transmitted from a remote transmitter to a receiver on the vehicle. The signal is relayed to the electronic control device for beginning the actuation sequence of the electrical components in response to the signal. Diagnostic analysis is performed upon the electrical components while actuating the electrical components with the remote transmitter.

Independent claim 15 is an apparatus claim including a remote transmitter for transmitting an actuation signal and a receiver located aboard a vehicle for receiving the actuation signal from the remote transmitter and relaying an actuation signal to the electrical components to be actuated for diagnostic purposes.

The dependent claim 5 (dependent to claim 1) and dependent claims 17 and 18 (dependent to claim 15) add the feature that there is a cycle of actuation for the electrical components which is performed. Claim 17 recites that there are selected ones of the electrical components which are

actuated. Claim 18 adds in the limitations to claim 17, such as found in claim 5 about the actuation cycle.

Dependent claim 11 (dependent to claim 10) claims the step of entering a temporary program into the electronic control device for actuating the components. Thus, no permanent memory of the control program need be stored.

Claims 12-14 recite that the steps of transmitting the signal and doing the diagnostic analysis are performed by a single operator.

Claims 7-9 recite that it is the receiver utilized for a keyless entry device which is the receiver on the vehicle utilizing the method of this invention. Claim 14 adds a similar limitation, but is dependent to claim 12.

In sum, the present invention discloses a control which allows actuation of several electrical components on a vehicle through the actuation of the remote transmitter. Thus, a single diagnostic operator can both actuate the components and then visually inspect their operation.

**Issues**

Is the rejection of the claims 1-18 over the Coverdill, et al. reference proper?

Is the rejection of the claims 5, 10, 17 and 18 under 35 USC §103 over Coverdill, et al. proper?

Is the rejection of claim 11 as being unpatentable over the Coverdill, et al. reference proper?

Is the rejection of claims 12-14 over the Coverdill, et al. reference proper?

Is the rejection of the claims 7-9 and 14 over the Coverdill, et al. patent combined with Doyle, et al. proper?

**Grouping of Claims**

The rejection of Claims 1-4, 6 and 15 is contested.

The rejection of Claims 5, 10, 17 and 18 is separately contested.

The rejection of Claim 11 is separately contested.

The rejection of Claims 12-14 is separately contested.

The rejection of Claims 7-9 is separately contested.

The rejection of Claim 14 is separately contested.

That is, the claims do not stand or fall across any of the above groups.

**Arguments**

*The rejection of all claims over the Coverdill, et al. patent is contested.*

Independent claim 1 recites a method step of relaying a signal from a remote transmitter to a receiver aboard a vehicle. The method further requires the step of actuating electrical components on the vehicle in response to the signal. The preamble sets forth that this method is for diagnostic analysis of the components.

Independent claim 10 recites that there be an actuation sequence for the vehicle components which is programmed into an electronic control device. A signal is transmitted from a remote transmitter to a receiver aboard the vehicle. The signal is relayed to the electronic control device

for beginning the actuation sequence of the electrical components in response to the signal. Diagnostic analysis is then performed on the electrical components while they are being actuated.

Independent claim 15 is an apparatus claim that requires a remote transmitter for transmitting an actuation signal and a receiver for receiving the signal from the transmitter and relaying an actuation signal to electrical components to be actuated for diagnostic purposes.

Coverdill, et al. does not "actuate" any electrical components. A control may be plugged into a data bus on the Coverdill, et al. patent, and that control will then receive a listing of all electrical components reporting on the data bus. However, no actuation of any of these components is provided in Coverdill, et al. The examiner points to a mention in Coverdill that if an electrical control unit has received a fault from an electrical component, this fault may be cleared by the control of Coverdill, et al. The examiner attempts to equate this resetting of a fault with "actuation" of the component itself. This is a faulty rejection and interpretation for two reasons. First, the claim requires that the electrical component itself be actuated. Coverdill, et al., at best, discloses resetting a fault in the control for all of the components. That is, this portion is Coverdill, et al. relates not at all to the components, but rather to the control. Further, nothing in Coverdill's, et al. resetting of a fault is "actuation" of any component. Simply, the examiner is not reading the claim term fairly.

The examiner also puts forth the argument that if Coverdill, et al. "can reset or monitor the subsystems, it also can actuate any of the electrical components on the vehicle". This argument is

unsupported, and inaccurate. Coverdill, et al. did not reset or monitor any subsystems. It merely clears a fault in a control. There is nothing in Coverdill, et al. that discloses resetting a tripped fault on some electrical component, but rather the resetting an indication in a control of a fault.

Moreover, this statement with regard to Coverdill, et al. and what "it also can" do is a glaring example of hindsight reasoning. Nothing in Coverdill, et al. discusses actuating any components, and what could be done by the Coverdill, et al. system is irrelevant. A method claim must be rejected by that which the reference discloses, and not by that which it could be utilized to perform.

Simply, Coverdill, et al. does not disclose anything that can properly meet any claim in this case.

*Rejection of Claims 5, 10, 17 and 18 is Improper*

Claim 10 is separately contested with regard to the claim 1 in that claim 10 requires that the actuation be performed in some sequence. Again, the operator outside performing the diagnostic analysis would like to know the proper sequence so that he would be looking at the proper location on the vehicle in the proper order. Nothing in Coverdill, et al. would provide a step that could meet the "actuation sequence" limitations.

Claims 5 and 18 also require the sequence language. Claim 17 requires that particular ones of the components can be actuated. Nothing in Coverdill, et al. could possibly meet these limitations. Coverdill, et al. does not operate in any sequence. Coverdill, et al. does not allow any

actuation at all as mentioned above. However, anything that could be actuation certainly does not occur in a sequence, or of any one component. As such, the rejection of claims 5, 10, 17 and 18 over Coverdill, et al. is improper for these additional reasons.

*The rejection of claim 11 is improper.*

Claim 11 requires the step of providing a temporary program into an electronic control device for actuating the electrical components. Nothing in Coverdill, et al. discloses a program for actuating components, and certainly does not disclose a temporary program. As such, claim 11 is allowable for this additional reason.

*The rejection of claims 12-14 is improper.*

Claims 13 and 14 depend ultimately through claim 12. Claim 12 requires the step of transmitting a signal and performing the diagnostic analysis by a single operator. Coverdill, et al. does not disclose any diagnostic operation, but would not be capable of meeting claim 12. For these additional reasons, these claims are allowable over the prior art.

*The rejection of claims 7-9 is improper.*

Claims 7-9 are rejected over Coverdill, et al. combined with the Doyle patent. The examiner finds that Doyle discloses keyless entry receivers are known. Appellant does not contest that keyless entry receivers are known, however, what Coverdill, et al. discloses is a data bus for downloading information. There is no suggestion anywhere in Doyle that would suggest utilizing such a remote connection in the Coverdill, et al. device. This is again hindsight. What Coverdill, et

al. is doing would not be suggested on any transmitter or receiver such as may be disclosed in Doyle. It is not appellant's contention that it has invented the concept of a keyless entry receiver on a vehicle, but rather it is utilizing such receiver for a unique purpose.

*The rejection of claim 14 is improper.*

The rejection of Claim 14 is improper for the same reason that the rejection of Claim 7 is improper. However, Claim 14, since it ultimately depends to Claim 12 is also improperly rejected for those additional reasons.

**CLOSING**

For the reasons set forth above, the rejection of all claims is improper and should be reversed. Such action is earnestly solicited.

Respectfully submitted,

Date: June 14, 2001

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## CERTIFICATE OF MAILING

I hereby certify that the enclosed Appeal Brief is being deposited (in triplicate) with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to Assistant Commissioner of Patents, Washington D.C. 20231 on this 26 day of June, 2001.

Laura Combs

## CLAIMS APPENDIX

1. A method of actuating electrical components of a vehicle for performing diagnostic analysis on the electrical components, said method comprising:

relaying a signal from a remote transmitter to a receiver aboard a vehicle; and

actuating electrical components on the vehicle in response to the signal from the transmitter.

2. A method as set forth in claim 1 including the step of performing diagnostic analysis upon the electrical components of the vehicle while actuating the electrical components with the remote transmitter.

3. A method as set forth in claim 2 wherein said step of relaying a signal from the remote transmitter is further defined by transmitting a radio frequency signal from a remote transmitter to a vehicle receiver.

4. A method as set forth in claim 3 including the step of relaying the signal received by the receiver to an electronic control device located aboard the vehicle.

5. A method as set forth in claim 4 wherein said step of actuating the electrical components is further defined by directing the electronic components through an actuation cycle programmed into the electronic control device.

6. A method as set forth in claim 3 further including the step of wiring the receiver to the electrical components for by-passing the electronic control device for directly signaling the electrical components.

7. A method as set forth in claim 2 wherein said step of relaying the signal received by the keyless entry receiver to the electronic control device located aboard the vehicle.

8. A method as set forth in claim 7 including said step relaying the signal received by the keyless entry receiver to the electronic control device located aboard the vehicle.

9. A method as set forth in claim 8 further including the step of wiring the keyless entry receiver to the electrical components for by-passing the electronic control device for directly signaling the electrical components.

10. A method of actuating electrical components of a vehicle for performing diagnostic analysis on the electrical components, said method comprising:

programming an electronic control device on a vehicle with an actuation sequence for vehicle electrical components;

transmitting a signal from a remote transmitter to a receiver aboard the vehicle;

relaying the signal to the electronic control device for beginning the actuation sequence of the electrical components in response to the signal from the transmitter; and

performing diagnostic analysis upon the electrical components while actuating the electrical components with the remote transmitter.

11. A method as set forth in claim 10, said step of programming the electronic control device is further defined by entering a temporary program into the electronic control device for actuating the electrical components.

12. A method as set forth in claim 10 wherein said steps of transmitting a signal, and performing diagnostic analysis are executed by a single operator.

13. A method as set forth in claim 12 wherein said step of relaying a signal from the remote transmitter is further defined by transmitting a radio frequency signal from a remote transmitter to a vehicle receiver.

14. A method as set forth in claim 12 wherein said step of relaying a signal from the remote transmitter is further defined by transmitting a radio frequency signal from a remote transmitter to a keyless entry receiver.

15. An apparatus for performing diagnostic analysis upon electronic components of a vehicle, wherein said apparatus comprises:

a remote transmitter for transmitting an actuation signal;

a receiver located aboard a vehicle for receiving the actuation signal from said remote transmitter and relaying an actuation signal to electrical components to be actuated for diagnostic purposes.

16. A method as set forth in claim 6 wherein said step of wiring the receiver to the electrical components is further defined by wiring the receiver to a standard electronic data bus for by-passing the electronic control device for directly signaling the electrical components.

17. An apparatus as set forth in Claim 15, wherein said actuation signal actuates selected ones of said electrical components, such that said signal requests particular ones of said electrical components to be actuated.

18. An apparatus as set forth in Claim 17, wherein said electrical components are actuated through an actuation cycle.

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